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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,306	02/13/2002	Alexander Leonidovich Berestov	03650.001013	6316

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NEW YORK, NY 10112

EXAMINER

FILIPCZYK, MARCIN R

ART UNIT	PAPER NUMBER
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2163

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/073,306

Applicant(s)

BERESTOV, ALEXANDER
LEONIDOVICH

Examiner

Marc R. Filipczyk

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-10 and 12-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-10 and 12-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

This Action is responsive to Applicant's amendment filed on November 15, 2006.

Claims 1-3, 5-10 and 12-17 are pending.

To expedite the process of examination Examiner requests that all future correspondences in regard to overcoming prior art rejections or other issues (e.g. amendments, 35 U.S.C. 112, objections and the like) set forth by the Examiner that Applicants provide and link to the most specific page and line numbers of the disclosure where the best support is found (see 35 U.S.C. 132).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-3, 5-10 and 12-15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth whether the invention accomplishes a practical application and whether it generates a useful, concrete and tangible result.

The guidelines explain that a practical application of a 35 U.S.C. 101 judicial exception is claimed if the claimed invention physically transforms an article or physical object to a different state or thing, or if the claimed invention otherwise produces a useful, concrete, and tangible result.

In the present case, independent claims 1 and 15 do not involve transformation of article or physical object to a different state or thing, they merely recite a section for storing data.

Further, independent claims 1 and 15 do not produce a useful, concrete, and tangible result, but

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merely recite a section for storing data. State Street, 149 F.3d at 1373-74, 47 USPQ2d at 1601-02.

Claim 1 taken as a whole is directed to an abstract idea, i.e., to only its description or expression, comprises non-functional descriptive material per se, does not comprise a practical application as explained above hence is nonstatutory.

Claim 15 taken as a whole is directed to a mere method, i.e., to only its description or expression, do not comprise a practical application as explained above hence is nonstatutory.

Since the claimed invention, as a whole, does not comprise a practical application as explained above, claims 2, 3, 5-10 and 12-14 which depend from claim 1, are deemed to be directed to non-statutory subject matter.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-3, 5-10 and 12-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The subject matter of “storing medical image topography” was not described in the specification in such a way as to enable one skilled in the relevant art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3, 5-10 and 12-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1, 15 and 16, the segment “medical image topography” is indefinite. It is not clear what medical image topography is or how it is obtained, and is not taught in the detailed description. Further regarding claims 1 and 15, the phrase “facilitating fusion” is indefinite. The feature is included in the preamble but is not taught in the body of the claims thus it is not clear how it is used in the invention.

Regarding claims 2, 3, 5-10, 12-14 and 17 depend from claims 1 and 16 respectively, and are therefore rejected on the same basis.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-10 and 12-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Henderson et al (U.S. Patent No 6,047,227).

Regarding claims 1, 15 and 16, Henderson discloses a data storage format for storing topography data associated with an object for facilitating fusion of images, comprising (fig. 1):

a first section for storing medical image topography data in relation to a reference entity with respect to which the medical image topography data is determined (fig. 1, item 104, and col. 3, lines 27-29: *desired site*);

a second section for storing information concerning the reference entity (fig. 1, item 104, and col. 3, lines 27-29: *actual site*);

a third section for storing information concerning the topography direction along which the topography data is measured or calculated with respect to the reference entity (fig. 1, item 102, and col. 3, lines 29-36: *differencing algorithm*), and Henderson further discloses an image is fused to the medical image topography data (figs, 5A and 5B, col. 7, lines 20-23: site contours are overlaid).

(Note: medical image topography is indefinite and is not taught in the detailed disclosure, thus to expedite the process of examination is interpreted as a topography data)

Regarding claims 2 and 3, Henderson discloses the topography and reference entities are in N-dimensional space (figs. 5A and 5B)

(Note: site models are 3 dimensional [3-D] geographies)

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Regarding claims 5-7, Henderson discloses the reference entity is described as a function, point or line in N-dimensional space (figs. 5A and B; function)

(Note: functions can be simplified to a line and a point by reducing their dimensions, i.e., xyz plane to xy coordinate, a point)

Regarding claims 8-10, Henderson discloses the reference entity and topographic direction are in Cartesian or non-Cartesian coordinate system and that their coordinates are known (col. 3, lines 17-25).

(Note: GPS and Radar use both Cartesian and non-Cartesian coordinate system to locate/monitor objects/geographies)

Regarding claim 12, Henderson discloses the reference entity and the topography direction are registered with respect to a first coordinate system, the first coordinate system being registered to the global coordinated system (col. 3, lines 17-25 and fig. 3, items 312 and 316).

Regarding claim 13, Henderson discloses a transformation is performed between the first coordinate system and a second coordinate system to which a three dimensional image is registered, the second coordinate system being independent from the first coordinate system and being registered to the global coordinate system (fig. 3, GPS, and col. 3, lines 29-35).

Regarding claims 14 and 17, Henderson discloses a three dimensional image is fused to the topography data (figs. 5A and 5B, col. 7, lines 20-23: site contours are overlaid).

Response to Arguments

Applicant's amendment and arguments filed November 15, 2006 have been fully considered but they are not persuasive. The arguments and responses are listed below.

Applicant argues on page 8 of the 11/15/06 response that the office agreed to withdraw statutory 101 rejections if claims 1 and 15 would be amended in view of claim 16.

Regarding the interview that took place on 10/31/2006 Examiner thanks the Applicant for clarifying the limitation of "topography direction". Examiner also notes that Applicant was advised to amend independent claims 1 and 15 in view of claim 16 to incorporate the feature of fusing data to meet the practical application requirement according to the MPEP.

Examiner agreed to withdraw the 101 rejections if Applicants would incorporate how the data stored is used in fusion. Instead, the aspect of fusion was only amended to the preamble. Although Applicant's attempt to address this issue is welcome Applicant is reminded that "facilitating fusion" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Applicant argues on page 9 of the 11/15/06 response regarding an indefinite rejection that the limitation of “medical image topography data” was agreed upon and would be dropped by the office.

Examiner disagrees. First, Examiner notes that upon closely re-reviewing Applicants claims it was confirmed that the limitation of “medical image topography data” is not taught anywhere by the disclosure, as such, this rejection is maintained. If Applicant can provide a specific mapping of the teaching of “ a medical image topography data” Examiner agrees to withdraw the rejection.

Applicant argues on page 10 of the 11/15/06 response that Mr. Leroux, Examiner’s supervisor agreed that the prior art rejection was inappropriate for a 102(b).

Examiner disagrees. Mr. Leroux, a Primary Examiner who participated in the 10/31/06 interview stated that the feature of “medical image topography data” was not taught by Henderson reference. Upon a closer review of the application, Examiner did not find any teaching about “medical image topography data” in the Applicant’s disclosure. As such, the limitation relied upon by the Applicant remains rejected under 35 U.S.C. 112 first and second paragraphs, respectively. However, Examiner agrees that the teaching of image topography data is taught by the Applicant’s disclosure and this feature along with other claimed limitations remains rejected over Henderson, accordingly.

With respect to all the pending claims 1-3, 5-10 and 12-17, Examiner respectfully traverses Applicant's assertion based on the discussion and rejections cited above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc R. Filipczyk whose telephone number is (571) 272-4019. The examiner can normally be reached on Mon-Fri, 8:30am-5pm.

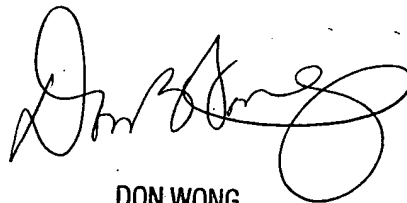
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MF

January 12, 2007

A handwritten signature in black ink, appearing to read 'Don Wong', with a large, stylized loop at the end.

DON WONG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100